Enhanced Short Term Forecast (ESTF) Initiative

Project Goal:

NWS Central Region offices will produce collaborated, decisive, high temporal and spatial resolution short-term (0-36 hour) forecasts and frequent updates. Forecasts will match observations and expected synoptic and mesoscale weather trends to facilitate accurate short-term impact-based decision support for a myriad of users.

Methodology:

Implement hybrid schedule-driven–event-driven forecast updates. Scheduled updates are issued every 3 hours around 0230, 0530, 0830, 1130, 1430, 1730, 2030, and 2330 UTC. Event-driven updates are issued more frequently as the weather dictates.

Current observations are initialized into the digital database to match reality. Meteorologists then ensure the short-term forecast is relevant, representative, and scientifically-consistent with observations, forecaster thinking, mesoscale processes, conceptual models, and expected trends. Mesoscale detail and parameter gradients are incorporated into the forecast process.

The majority of changes at each update will be in the first 12 hours of the forecast, but the 12-36 hour forecast also will be revised proactively as needed.

Eleven NWS offices are participating in a testbed to assess and determine the best process to achieve project goals while maintaining a constantly relevant, accurate database.

Start Date:

February 15, 2012

End Date:

May 31, 2012

Testbed Offices:

Jackson (JKL), Louisville (LMK), Paducah (PAH), St. Louis (LSX), Detroit/Pontiac (DTX), Grand Rapids (GRR), Gaylord (APX), Marquette (MQT), Goodland (GLD), Dodge City (DDC), Grand Junction (GJT).

Services:

Improved short-term forecasts to facilitate greater user decision support. Issuance times may differ from current practice, but all forecasts will represent the most relevant, latest thinking.

Area Forecast Discussions (AFDs) will be issued for each tangible forecast update.

Short-term information on the National Digital Forecast Database will be more accurate and up-to-date in testbed county warning areas.

“Point and Click” forecasts on NWS testbed office websites will contain frequently revised data and detail. The “Activity Planner” on these websites will contain detailed, hourly tabular and graphical forecast information (meteorograms) for maximum customer utility.

Other forecast services (e.g., aviation/TAFs, AFM, PFM, HWO, hazardous weather headlines, fire weather, etc.) will be consistent with the ESTF.

Feedback:

User feedback is critical to the evaluation and success of the ESTF testbed process. Please forward the benefits, drawbacks, perception, and utility of ESTF to your operations to your participating ESTF NWS office for relay to the regional ESTF team. Thank you.